

**ELECTIVE COURSE - III b - SOFTWARE TESTING**

**Unit I: Software Quality**

Quality Concepts - Quality Movement – Software Quality Assurance – Software Reviews – Formal Technical Reviews – Formal Approaches to SQA – Statistical Software Quality Assurance - Software Reliability – The ISO 9000 Quality Standards – The SQA Plan

**Unit II: Testing Fundamentals - 1**

Testing Fundamentals – Types of Testing – White box testing – Black box testing – Integration testing – System and acceptance testing.

**Unit III: Testing Fundamentals – 2 & Specialized Testing**

Performance testing – Regression testing - Testing of Object Oriented Systems – Usability and Accessibility testing.

**Unit IV:**

Test Planning, Management, Execution and Reporting

**Unit V:**

Software Test Automation - Test Metrics and Measurements

**Text Books:**

1. Software Engineering Concepts and Practices - Roger S Pressman, TMG, Sixth Edition ( For Unit I )
2. Software Testing (Units II, III, IV, V) – Srinivasan Desikan, Gopalaswamy Ramesh - Pearson Education 2006

**Reference Books:**

1. Introducing Software Testing – Louis Tamres, Addison Wesley Publications, First Edition.
2. Software Testing, Ron Patton, SAMS Techmedia, Indian Edition 2001
3. Software Quality – Producing Practical, Consistent Software – Mordechai Ben – Menachem, Gary s. Marliss, Thomson Learning, 2003.